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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,280	02/14/2002	Ping-Ling Fan	67,200-671	3287

7590 02/18/2003

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EXAMINER

GUADALUPE, YARITZA

ART UNIT PAPER NUMBER

2859

DATE MAILED: 02/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,280

Applicant(s)

FAN ET AL.

Examiner

Yaritza Guadalupe

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: # 60, 62, 84. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

The omitted structural cooperative relationships are: the structural connection and/or location of the gauge with respect to the apparatus as claimed.

Claims 2 – 10 are rejected due to their dependency on claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 3, 5, 11 – 13 and 15 are rejected under 35 U.S.C. 102 (b) as being anticipated by Admitted Prior Art [Hereinafter APA].

APA discloses an apparatus comprising a gauge (92) for measuring a gap between said baffle and the chamber wall (See Figure 4 and page 13, lines 1 - 5 of the Specification) in order to level said electrostatic chuck, which can be also translated into prevention of peeling or damaging said chamber wall. APA discloses an apparatus for use in various semiconductor fabrication operation, .e.g., wet cleaning semiconductor operation. APA discloses what is considered, as best understood by the examiner, a horizontal gap gauge (92).

With respect to the preamble of the claim : the preamble of the claim does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon

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the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

Regarding claims 11 – 13 and 15 : The method as stated in claims 11 – 13 and 15 can be met by the regular operation of the apparatus and system disclosed by APA.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art [Hereinafter APA].

APA discloses an apparatus as stated in paragraph 4 above.

APA does not disclose the particular orientation of the gap gauge, i.e., horizontal, as stated in claim 4. APA does not disclose a leveling gauge as stated in claim 6.

With respect to claim 4 : APA discloses a gap gauge (92) which as best understood by the examiner can be considered a horizontal gap gauge due to its orientation. However, changing the location of the gap gauge from the location shown by APA to a location measuring the horizontal gap, absent any criticality, is only considered to be an obvious modification of APA apparatus that a person having ordinary skill in the art at the time the invention was made would be able to provide using routine experimentation since the courts have held that there is no invention in shifting the position if the operation of the device would not be thereby modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

With respect to the method as stated in claim 14 : The method as stated in claim 14 can be met by the regular operation of the apparatus and system disclosed by APA.

8. Claims 6 and 16 are rejected under 35 U.S.C. 103 (a) as being unpatentable over APA in view of Hunter (US 6,468,816).

APA discloses an apparatus as stated in paragraph 4 above.

APA does not disclose a leveling gauge as stated in claims 6 and 16.

Hunter discloses a processing system having a processing chamber (12) having a bubble level (26) for determining the inclination of the blade (18) in order to avoid misalignment during a process. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a bubble level / leveling gauge as taught by Hunter in the apparatus disclosed by APA in order to correct from damages due to expansion / shrinkage on the surface to be leveled that may result in malfunction of the process overtime.

With respect to the method as stated in claim 16 : The method as stated in claim 16 can be met by the regular operation of the apparatus and system disclosed by APA.

Allowable Subject Matter

9. Claims 17 – 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 7 – 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Carbone et al. (US 6,446,581) discloses an apparatus having a combustion chamber (15), a baffle plate (100), and wherein a gap is desired between the baffle plate and the chamber walls to be between 0.25 – 0.75 inches (See Column 5, lines 31 – 35). Milina (US 5,444,921) discloses a gap gauge device. Lee (US 6,323,494) discloses a device having a gap sensor. Itoh et al. discloses an apparatus comprising a gap gauge for measuring a gap between surfaces (See Column 11, lines 26 – 28).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe whose telephone number is (703)305 -5676. The examiner can normally be reached on 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Yaritza Guadalupe
Patent Examiner
Art Unit 2859
February 11, 2003

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